

Metaphysics: ontology, theology, logics

Reality/Being

“Metaphysics means only an unusually obstinate attempt to think clearly and consistently.”

William James

What is reality?



**“Reality is
fixed
and bound by **existence**,
we must strive to align
our perceived reality
with
actual reality.”**

Reality is fixed and **how humans understand it shapes their actions.**

Reality is what is in existence:

it is **the coexistence of energy and matter.**

The **perceptions** formed in **the mind** using **imagination** are **the truth** for the perceiver only.

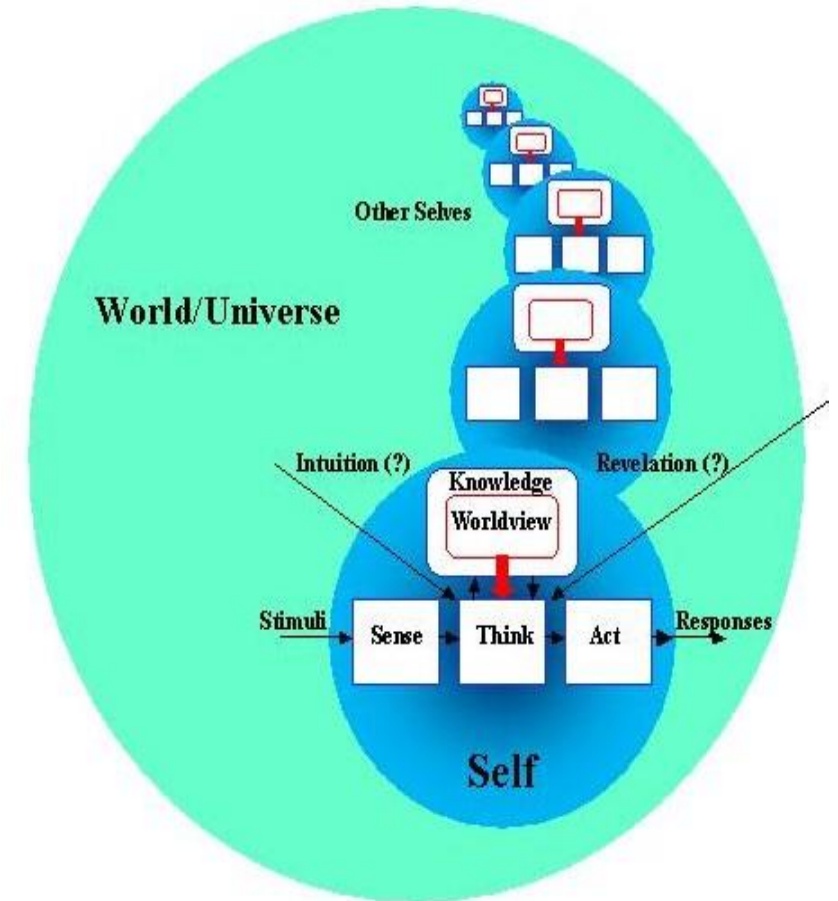
Aligning the perceived reality with actual reality is **the purpose** of living for **all human beings.**

They need to channelize the power of imagination **to be able to understand and know**

the reality as it actually exists,

and

be blissful.



Metaphysics

- Metaphysics: subject, questions, etymology, branches.
- Existence and Consciousness
- The basic concepts of philosophy of Being/ reality: Monism (physicalism & idealism), Dualism, Pluralism.
- Existence and Consciousness; Mind and Matter; Identity and Change, Space and Time...

Metaphysics, as a branch of knowledge

concerned with the nature of **existence**,

being and the **world**;

the **foundation** of philosophy:

Aristotle calls it "**first philosophy**"

(or sometimes just "**wisdom**"),

and says

it is the subject that deals with

"first causes and the principles of things".

Metaphysics asks questions like:

- "What is the nature of reality?"
- "How does the world exist, and what is its origin or source of creation?"
- "Does the world exist outside the mind?"
- "How can the incorporeal mind affect the physical body?"
- "If things exist, what is their objective nature?"
- "Is there a God (or many gods, or no god at all)?"

The word “Metaphysika”: 2 meaning

the Greek word

literally "after physics"

merely indicated that part of

Aristotle's oeuvre

which came, in its sequence,

after those chapters which dealt

with **physics**.

the medieval word

was misinterpreted by Medieval commentators on the classical texts as that which is **above** or **beyond** the **physical**, and so over time metaphysics has effectively become

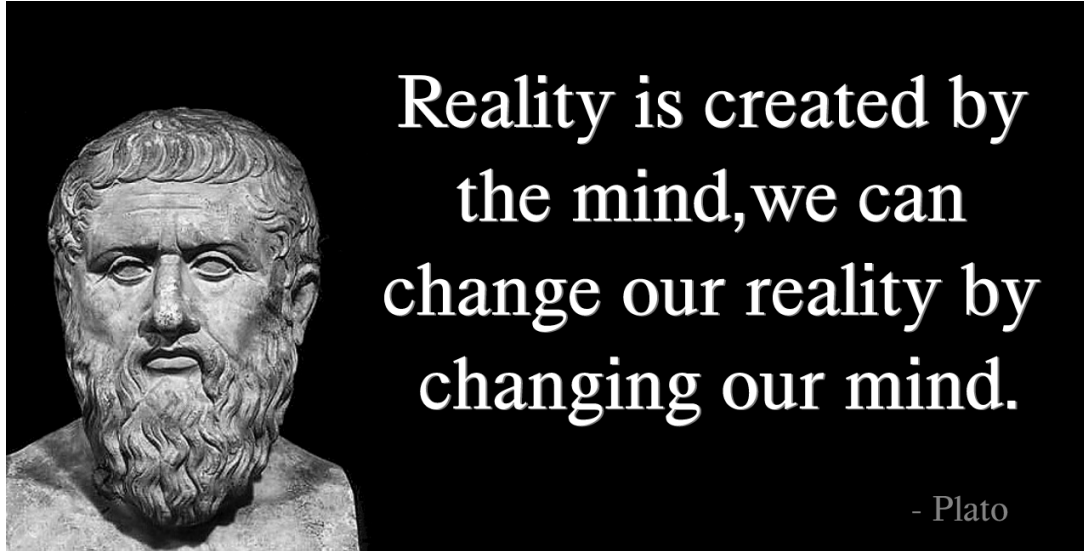
the study of that which transcends physics.

Aristotle originally split his metaphysics into three main sections :

1. **Ontology** (the study of **being** and **existence**, including the definition and classification of entities, physical or mental, the nature of their properties, and the nature of **change**)
2. **Natural Theology** (the study of **God**, including the nature of **religion** and the **world**, existence of the **divine**, questions about the **creation**, and the various other religious or spiritual issues)
3. **Universal Science** (the study of **first principles** of logic and reasoning, such as the **law of noncontradiction**)

Metaphysical statement

usually implies an **idea**
about the world or the universe,
which may seem **reasonable**
but is ultimately **not**
empirically verifiable,
testable or
provable.



- Plato is one of the greats of philosophy whose contribution to mankind is unparalleled. We should be thankful to him for probing deeply into the nature of reality and remaining a torchbearer in philosophy for centuries. This quote was true when human beings were not enlightened about the principle of coexistence and is no longer valid. Plato was right in identifying that human beings can perceive reality through the mind. But he was off the track when he said- we can change our reality by changing our minds.

Existence and Consciousness

Existence (the fact or state of **continued being**) is **axiomatic** because it is **necessary** for all **knowledge** and it cannot be denied without conceding its truth (a denial of something is only possible if existence exists).

"Existence exists" is therefore an **axiom** which states that there is **something**, as opposed to **nothing**.

be **axiomatic** - meaning that it does not rest upon anything in order to be **valid**, and it cannot be proven by any "**more basic**" premises

Consciousness

is the faculty which **perceives** and **identifies**
things that exist.

it requires something **outside of itself** in order to
function:

it requires, and is dependent upon, **existence**.

The primacy of existence states

that existence is **primary** and consciousness is **secondary**,
because there can **be** no consciousness
without something existing to perceive.

Existence

is **independent of, makes possible,** and is a **prerequisite**
of consciousness.

Consciousness is not responsible for **creating** reality:
it is completely **dependent** upon reality.

Mind and Matter

Early debates on the nature of matter centered on identifying a single underlying principle (**Monism**):

Water was claimed by Thales,

Air by Anaximenes,

Apeiron (meaning "the undefined infinite") by Anaximander,

Fire by Heraclitus,

The four classical elements of the ancient world: **earth, air, fire and water** by Empedocles (**Pluralism**).

Democritus conceived an **atomic theory** (**Atomism**) many centuries before it was accepted by modern science.

The **nature of the mind**

and its **relation to** the body

has also exercised the best brains for millennia.

There is a large overlap here with **Philosophy of Mind**,

which is the branch of philosophy that studies

the nature of the **mind**,

mental events, mental functions, mental properties

and consciousness,

and their relationship to the physical body.

What is the best possible world hypothesis?

The claim that the actual world is the best of all possible worlds is the central argument in Leibniz's theodicy, or his attempt to solve the problem of evil.



Gottfried Leibniz, the philosopher who coined the term "best of all possible worlds" in his 1710 work *Théodicée*.

What are the 5 arguments in philosophy?

- The Five Ways
- First way: The Argument of the Unmoved Mover.
- Second way: The Argument of the First Cause.
- Third way: The Argument from Time and Contingency.
- Fourth way: The Argument from Degree.
- Fifth way: Argument from Final Cause or Ends.

Mind and Matter

Substance Dualism or Cartesian Dualism

Descartes proposed a Dualist solution whereby

the **mind** and **body** are totally **separate** and **different**:

the mental does not have extension in space, and the material cannot think.

Idealists

like Bishop George Berkeley and the German Idealist school, claim that material objects do not exist unless perceived

(Idealism is essentially a Monist, rather than Dualist, theory in that there is a single universal substance or principle).

Neutral Monism

Baruch Spinoza and Bertrand Russell
both adopted, in different ways,

a dual-aspect theory

which claims that existence consists of

a single substance which in itself is **neither mental
nor physical,**

but is capable of mental and physical **aspects or attributes.**

The dominant metaphysics in the 20th Century has been various versions of Physicalism (or Materialism)

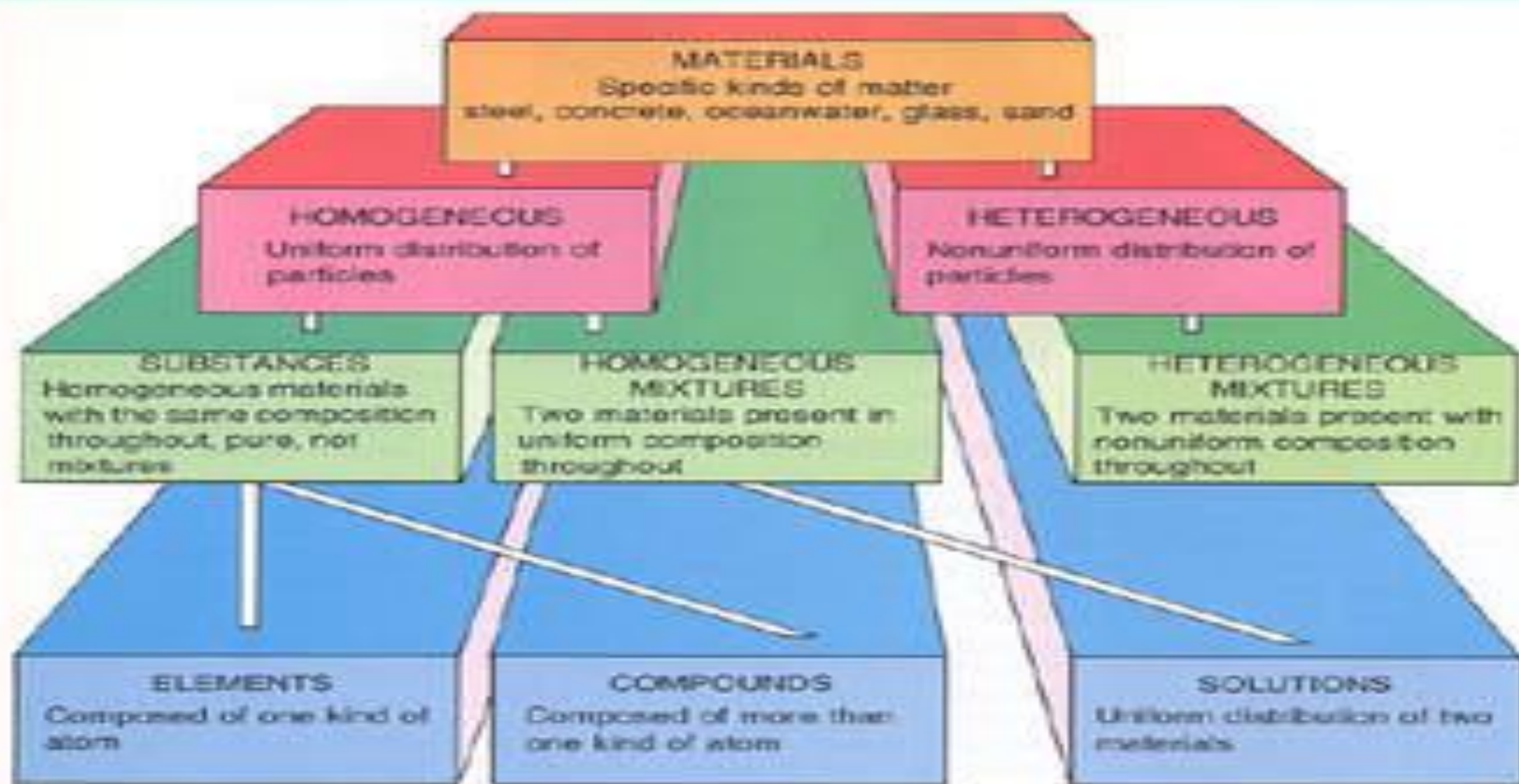
In the last century, **science**

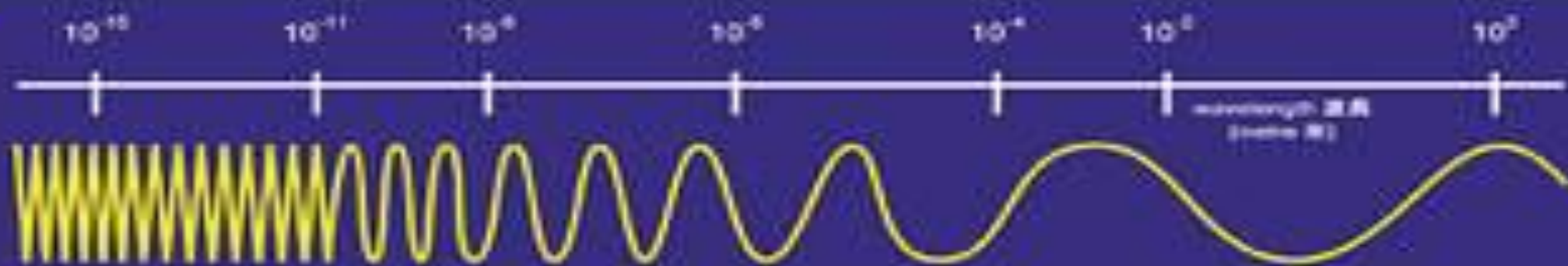
(particularly **atomic theory, evolution, computer technology and neuroscience**)

has demonstrated many ways in which mind and brain interact in a **physical** way, but the exact nature of the relationship is still open to debate.

a Monist solution which explains matter and mind as mere **aspects** of each other, or **derivatives** of a neutral substance.

Classification of Matter





Gamma ray
γ 射線



X-ray
X 射線



Ultraviolet
紫外線



Visible
光線



Infrared
紅外線



Microwave
微波



Radio
無線電波



More energy 較高能量
Ionizing radiation 電離輻射



Less energy 較少能量
Non-ionizing radiation 非電離輻射



	LEPTONS		QUARKS	
<ul style="list-style-type: none"> • They are elementary particles. • They are not made up of anything else. 	Electron It is a negatively charged lepton. It is present in all atoms. It is the lightest lepton. 	Electron neutrino It is a neutral lepton. It is the lightest neutrino. 	Up It is a positively charged quark. It is present in all protons and neutrons. 	Down It is a negatively charged quark. It is present in all protons and neutrons. 
<ul style="list-style-type: none"> • They are elementary particles. • They are not made up of anything else. 	Muon It is a negatively charged lepton. It is heavier than the electron. 	Muon neutrino It is a neutral lepton. It is heavier than the electron neutrino. 	Charm It is a positively charged quark. It is heavier than the up quark. 	Strange It is a negatively charged quark. It is heavier than the down quark. 
<ul style="list-style-type: none"> • They are elementary particles. • They are not made up of anything else. 	Tau It is a negatively charged lepton. It is the heaviest lepton. 	Tau neutrino It is a neutral lepton. It is the heaviest neutrino. 	Top It is a positively charged quark. It is the heaviest quark. 	Bottom It is a negatively charged quark. It is the second heaviest quark. 

The periodic table is color-coded and labeled with various groups and categories:

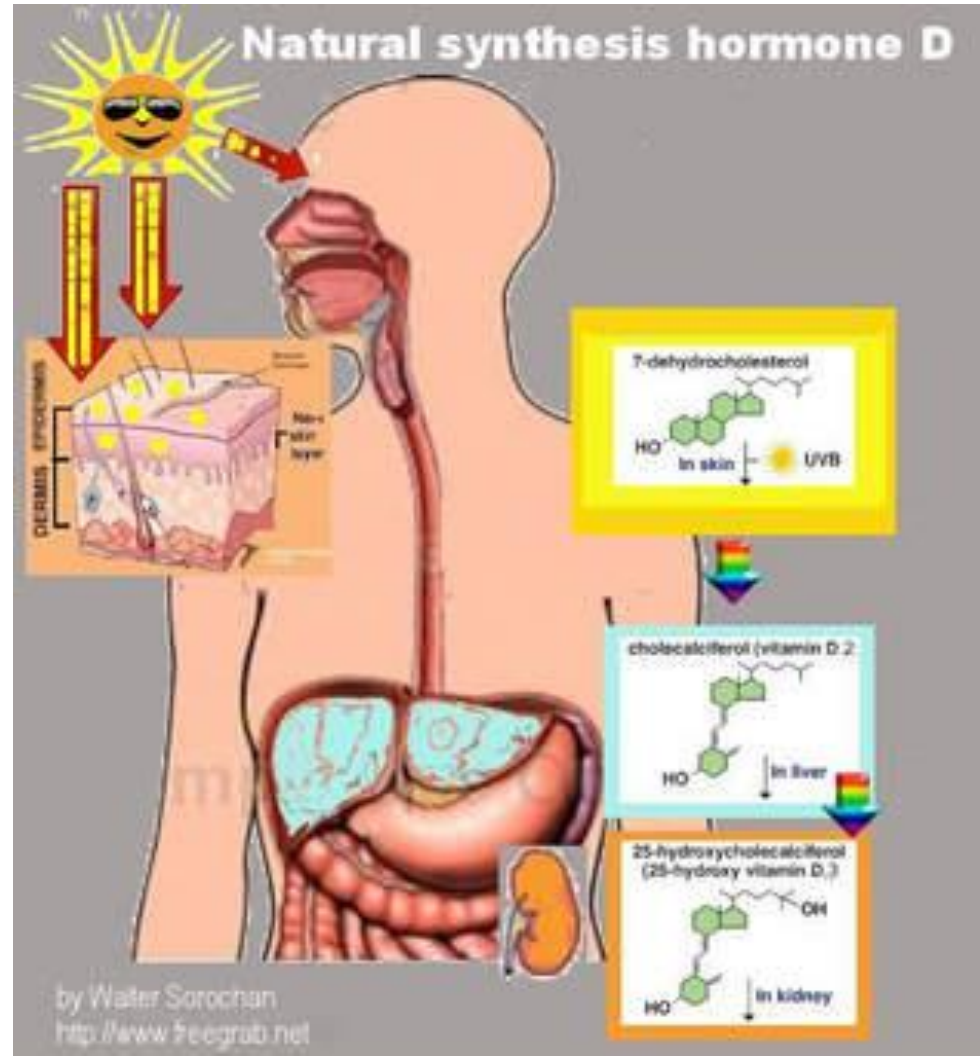
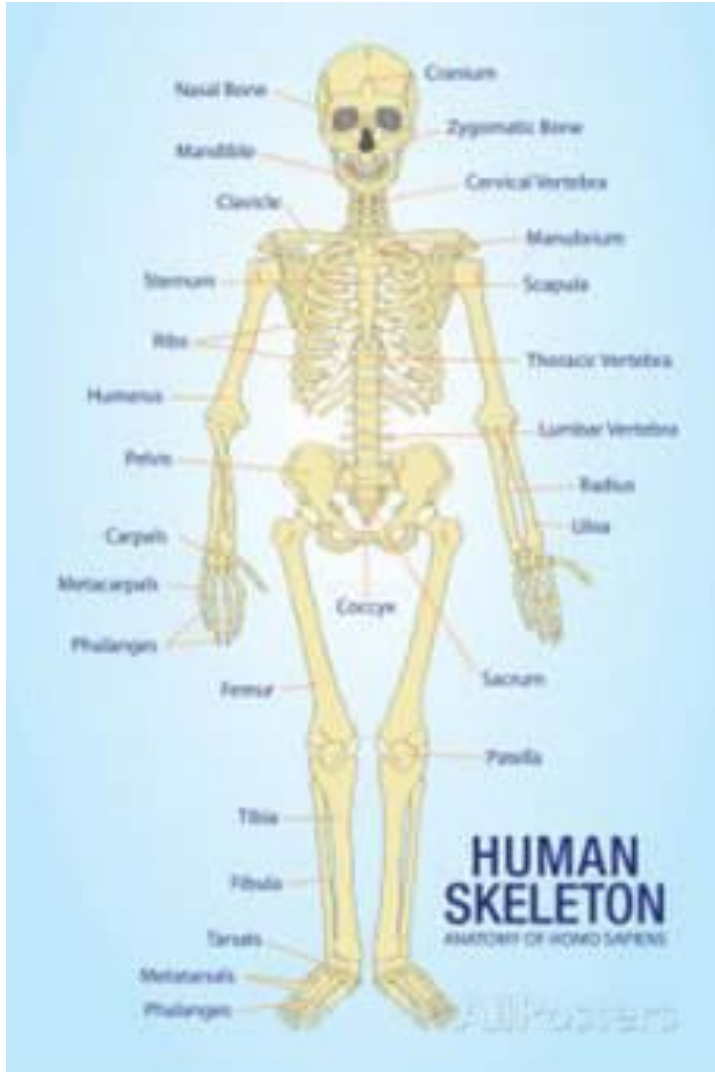
- Alkali metals:** Group IA (1)
- Alkaline earths:** Group IIA (2)
- Transition metals:** Groups IIIB (3) to IIB (12)
- Post-transition metals:** Groups IIIB (13) to IIB (12)
- Noble gases:** Group VIIA (18)
- Other groups:** IIIA (13), IVA (14), VA (15), VIA (16), VIIA (17)

IA 1	IIA 2	IIIB 3	IVB 4	VB 5	VIB 6	VII B 7	VIII 8	VIII 9	VIII 10	IB 11	IIB 12	IIIA 13	IVA 14	VA 15	VIA 16	VIIA 17	VIIA 18
H												B	C	N	O	F	He
Li	Be											Al	Si	P	S	Cl	Ne
Na	Mg											Ga	Ge	As	Se	Br	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	In	Sn	Sb	Te	I	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds								
		Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb Lu															
		Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No Lr															

semimetals (metalloids): A diagonal line separates metals from non-metals, passing through elements like Boron, Silicon, Germanium, and Antimony.

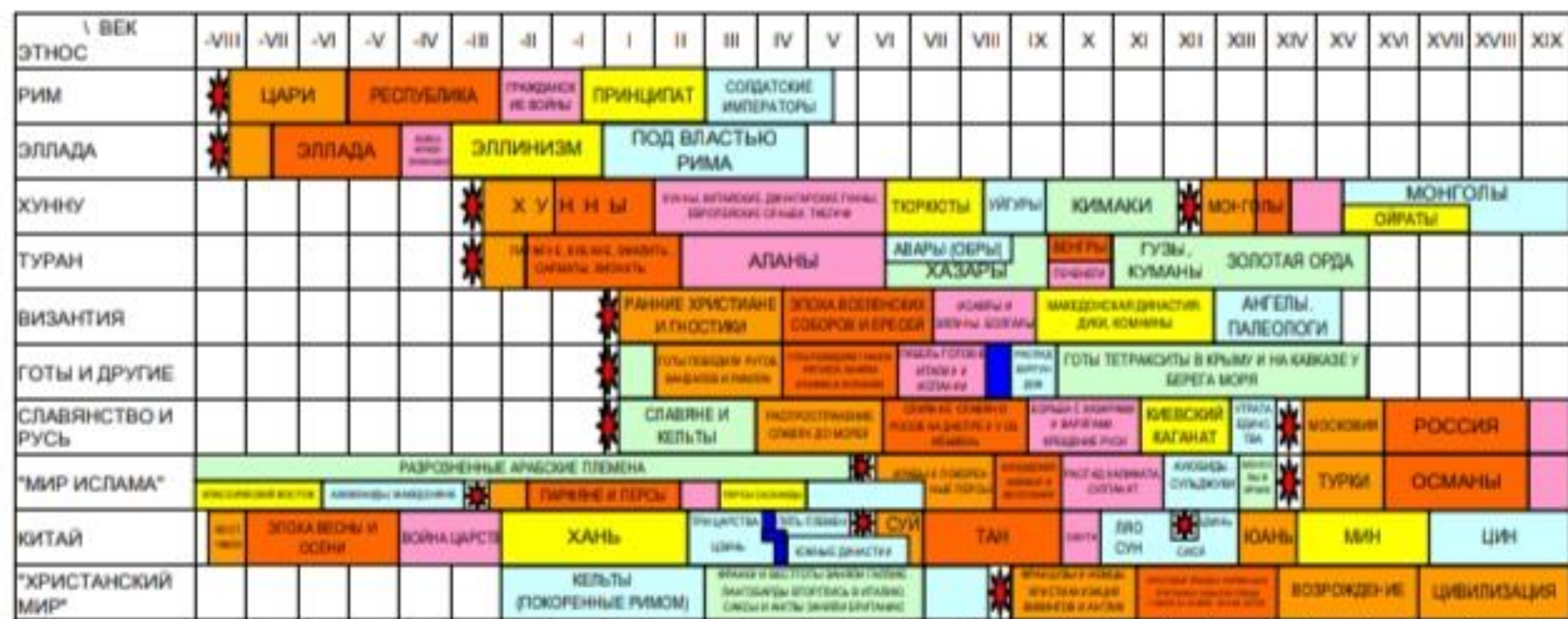
lanthanides: The series of 14 elements from Ce to Lu.

actinides: The series of 14 elements from Th to Lr.

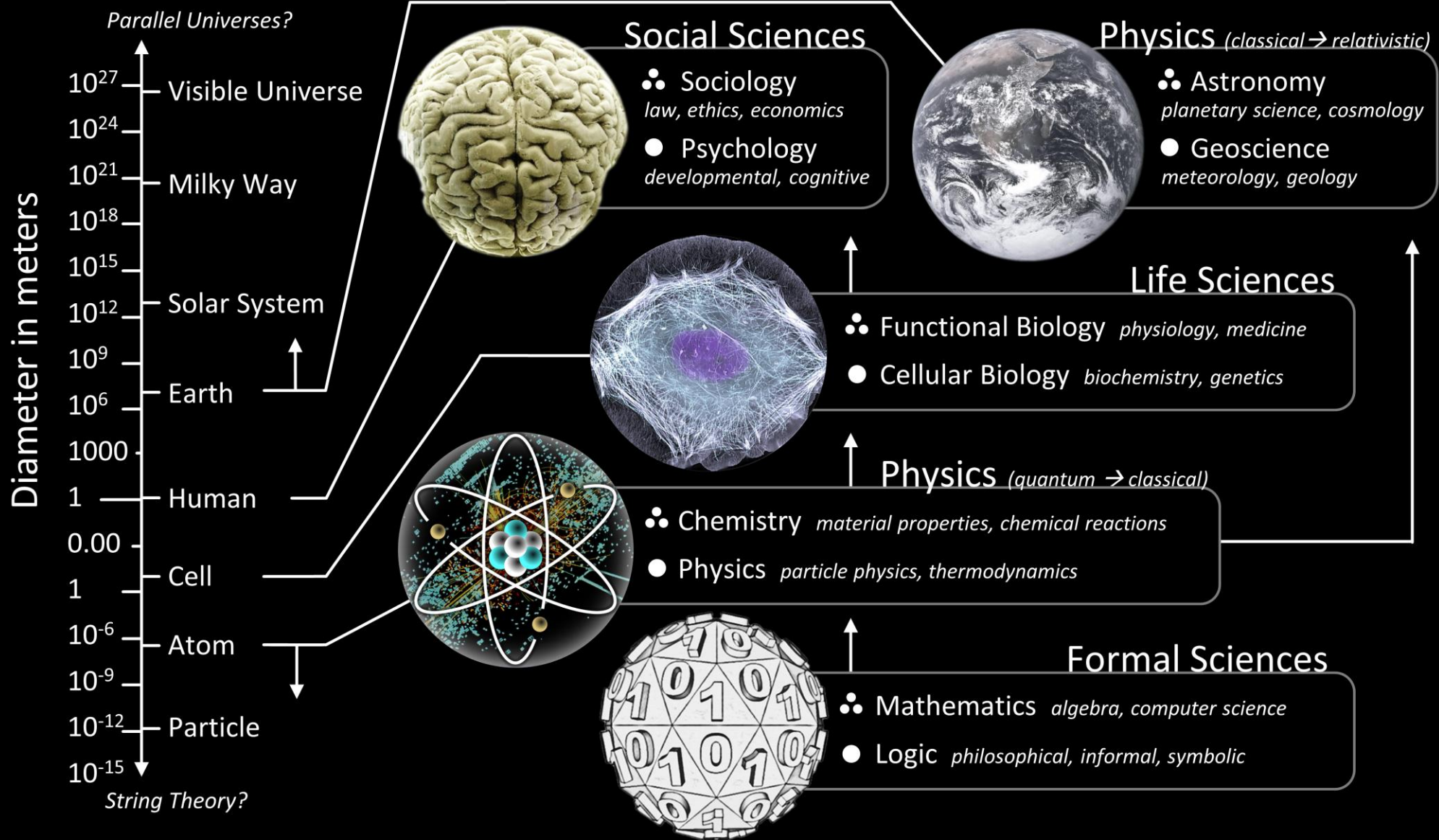


IQ & EQ

Рис. 7. ФАЗЫ ЭТНОГЕНЕЗА НА СУПЕРЭТНИЧЕСКОМ УРОВНЕ



The Universe Hierarchy of the Sciences



Objects and their Properties

The world contains many individual things (**objects** or **particulars**),
both **physical** and **abstract**,
and what these things have in common with each other are called
universals or **properties**.

Metaphysicians are interested in
the nature of objects and their properties,
and the **relationship between the two**.

(1)The problem of **universals**. (2) Any object or **entity is the sum of its parts** (see **Holism, Reductionism**)

Identity and Change

Identity is whatever makes an entity

definable and **recognizable**,

in terms of possessing a set of **qualities** or **characteristics**

that **distinguish** it from entities of a different type

(effectively, whatever makes something the **same** or **different**).

Aristotle's Law of Identity

states that to exist, **an existent** (i.e. an entity that exists)
must have

a **particular, single** identity;

an object cannot have two identities at the same time or
in the same respect.

The concept of identity is important because
it makes explicit that **reality** has a **definite nature**,
which makes it **knowable** and, since it exists in a particular way,
it has **no contradictions**
(when two ideas each make the other impossible).

Change is the alteration of identities

For something to **change** (which is an **effect**), it needs to be **acted on** (**caused**) by a previous action.

Causality is the law that states that each **cause** has a **specific effect**, and that this effect is dependent on the initial **identities** of the agents involved.

We are intuitively aware of **change** occurring over time (e.g. a tree loses a leaf).

The **Ancient Greeks** took some extreme positions on the nature of change: **Parmenides denied** that change occurs at all, while **Heraclitus** thought change was **ubiquitous**.

Space and Time

A traditional **Realist** position

is that
time and **space**
have existence
independent
from
the **human mind**.

Idealists

claim that
space and **time**
are **mental constructs**
used to organize **perceptions**,
or are otherwise **unreal**.

Necessity and Possibility

A **necessary** fact
is true across
all
possible worlds

A **possible** fact
is one that is true
in **some** possible world,
even if not in the **actual** world.

Abstract Objects and Mathematics

Some philosophers hold that there are **abstract objects**,
(such as **numbers, mathematical objects** and
fictional entities)
and **universals**
(properties that can be possessed by multiple objects,
such as "redness" or "squareness"),
both of which are **outside** of space and time.

Abstract Objects and Mathematics

- **Realism**, best exemplified by **Plato** and his Platonic Forms, teaches that universals really exist, **independently** and somehow prior to the world.
- **Nominalism** holds that there is really **no such thing** as abstract objects, which really exist only as **names**, because a single object cannot exist in multiple places **simultaneously**.
- **Moderate Realism**, as espoused by Aristotle, tries to find some middle ground between Nominalism and Realism, and holds that there is no **realm** as such in which universals exist, but rather they are **located** in space and time wherever they happen to be **manifest**.
- **Conceptualism**, the doctrine that universals exist only **within the mind** and have no external or **substantial reality**, is also an intermediate solution.

Determinism and Free Will

Determinism is the philosophical proposition that every event, including human cognition, decision and action, is **causally determined**

by an unbroken chain of prior occurrences.

Thus, there is at any instant only one physically **possible future**, and no **random, spontaneous, mysterious** or **miraculous events** ever occur

Free Will

Hard Determinists

This posits that there is no such thing as Free Will, where rational agents can exercise **control** over their own actions and decisions.

Baruch Spinoza, view determinism and free will as **mutually exclusive**.

Soft Determinists

Thomas Hobbes believe that the two ideas can be **coherently reconciled**.

Cosmology and Cosmogony

is the branch of metaphysics that deals with the **world** as the totality of all phenomena in **space** and **time**.

Historically, it was often founded in religion;
in modern use it addresses questions
about the world and the universe
which are **beyond the scope** of physical science.

Cosmogony deals specifically with the **origin of the universe**,
but the two concepts are closely related.

Cosmology and Cosmogony

- **Pantheists**, such as Spinoza, believe that God and the universe are one and the same.
- **Panentheists**, such as Plotinus, believe that the entire universe is part of God, but that God is greater than the universe.
- **Deists**, such as Voltaire, believe that God created the universe, set everything in motion, and then had nothing more to do with it.